LETTERS *to the Editor*

Prisoner Volunteers

TO THE EDITOR: Twenty-eight years ago I spent six months in a Federal prison doing research for the National Institutes of Health using "prisoner volunteers" as subjects. After six months of asking myself whether a prisoner really could be a volunteer, I decided I could not answer the question satisfactorily and asked for a transfer. My bias told me that a prisoner could not be a volunteer; only a free man could be a volunteer. That was my bias then and that is my bias now.

Until the question, "Can a prisoner be a volunteer?" is answered there are no pros and cons to measure, as Dr. White and his Committee on Evolving Trends in Society have so heroically attempted. (West J Med 124:514-516, Jun 1976). With the central question unanswered such efforts as theirs are futile.

The mistake is made by assuming that one is dealing with a balance sheet where one can add and subtract and arrive at a valid result. The moral question is not an adder or subtracter the way safety and significance of experiment, adequacy of informed consent and many other factors are; it is a multiplier. Thus, if my bias is correct all factors are multiplied by zero and their relative sums are meaningless.

Because we are rational people we tend to distrust gut feelings. We believe we can measure matters and decide what is right and what is wrong. I believe we should trust gut feelings in moral issues and act accordingly. In the instance of prisoner volunteers, until the question of whether they *can* be volunteers is answered, experiments on them will always carry a taint, a question, an imperfection which doesn't exist when one experiments on free man.

As long as this is so I say don't do it. Act as if the gut feeling is right—however unanswerable it may seem—and don't do it.

Philosophers, jurists, moralists or politicians may some day prove that a prisoner can indeed be a volunteer in the framework of what we seek to have as a good society, and when they do we can pick up where we left off.

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Management of Lung Abscess

TO THE EDITOR: I read with interest the Medical Staff Conference on Lung Abscess (West J Med 124:476-482, Jun 1976) and the accompanying editorial on the same subject by Dr. Finegold (West J Med 124:494-496, Jun 1976). The comments by Dr. Murray and Dr. Finegold were most illuminating, particularly concerning the pathogenesis, bacteriology and antibiotic treatment of the disease. I must say, however, that I was disappointed in the management of the patient, particularly early in the course of his disease, and the fact that neither Dr. Murray nor Dr. Finegold commented on these shortcomings.

All that glitters is not gold, all that wheezes is not asthma and all that cavitates is not tuberculosis. I do not believe that the presence of a positive skin test for tuberculosis in a patient with a cavitary lesion of the lung is enough evidence to treat him with antituberculous medications alone for a four-week period of time. Early bronchoscopy with brushing and biopsy, along with anaerobic as well as aerobic cultures for fungi and acid-fast bacilli, should have been performed at the outset. Even after the patient was admitted to the University of California Hospital he was treated for almost two weeks with intravenous penicillin alone without further bacteriologic studies or bronchoscopy.

Pyogenic lung abscess is a serious disease, the treatment and prognosis of which have changed remarkably in the antibiotic era. I agree with Dr. Murray that "surgical operation is rarely carried out" if he means that open drainage or resectional surgery are rarely indicated. However, bronchoscopy should be performed early in every patient with lung abscess both for diagnostic and therapeutic purposes.

Flexible fiberoptic bronchoscopy has been a significant advance in the management of patients with lung abscess. On three occasions recently we have been able to enter a lung abscess with the flexible bronchoscope or with a suction catheter passed through it and have aspirated up to 50 ml of pus for cytologic, bacteriologic and fungal studies. In this manner transbronchial drainage has been established and excellent material has

been obtained for study to establish the etiology of the abscess.

Dr. Finegold mentions that "direct lung puncture is more hazardous in adults than transtracheal aspiration." I would like to go further and condemn the use of this procedure in lung abscess. I believe that there is a real chance that seeding of the pleural space with microorganisms may occur following such a procedure and, even worse, a persistent bronchopleural fistula may be established. Unfortunately, we have seen the latter occur recently in our hospital.

Again I would like to commend the authors for their discussion but urge the early, aggressive and even repeated use of bronchoscopy in patients with lung abscess. Although antibiotics have changed the picture of pyogenic lung abscess to a significant degree their use does not obviate the necessity for specific bacteriologic information, establishment of proper drainage pathways and general supportive care of these patients.

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Dr. Murray Replies

TO THE EDITOR: Dr. Mark's letter raises some interesting and controversial points concerning the role of bronchoscopy in patients with lung abscess. In my opinion, bronchoscopy is useful in these patients under two different circumstances: as an aid in diagnosis and as an ancillary means of managing the patient.

First, bronchoscopy is a time-honored and valuable procedure in patients with a wide variety of pulmonary lesions of uncertain origin, including lung abscess. Furthermore, the diagnostic yield from bronchoscopy has been magnified considerably in recent years owing to the increased range of observation and access available to the fiberoptic instrument. But if the specific cause of a lung abscess has been established by other methods, and there are no unusual features to the patient's illness (for example, an abscess in an edentulous person, suspicion of foreign body or bronchogenic carcinoma), bronchoscopy is not warranted simply because an abscess is present. This recommendation certainly is true for lung abscesses caused by necrotizing infections such as tuberculosis and coccidioidomycosis and, I believe also holds true for pyogenic lung abscesses caused by anaerobes, staphylococci or klebsiella. Once the diagnosis is made by Gram stain and culture and appropriate antimicrobial therapy instituted, the great majority of patients with lung abscess from necrotizing infections will recover without ever having been bronchoscoped.

The value of bronchoscopy as a means of obtaining secretions is probably not as reliable as implied by Dr. Mark. The limitations of the procedure, which were touched on by Dr. Finegold, have been confirmed by a recent article.[1]

Second, bronchoscopy is useful as a means of promoting drainage of abscesses, especially if a catheter can be inserted into the cavity. Thus we perform bronchoscopy in patients with lung abscess who demonstrate signs of retention of pus in the cavity (persistent fever, leukocytosis, systemic toxicity and a fluid level) five to ten days after antimicrobial therapy has been started. Material is obtained for culture and airway obstruction is looked for, but the procedure is chiefly to get rid of pus. When effective, we have no hesitation in repeating bronchoscopy, as recommended by Dr. Mark, as often as needed.

These policies were carried out in the patient under discussion who was bronchoscoped, as stated in the protocol, while he was being followed as an outpatient with suspected tuberculosis. Later, after he was hospitalized and failed to respond to nine days of penicillin therapy, another bronchoscopy was recommended but the patient signed out against advice. He could have been bronchoscoped during his admission to the University of California Hospital but his prompt response to clindamycin made this unnecessary.

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REFERENCE

1. Bartlett JG, Alexander J, Mayhew J, et al: Should fiberoptic bronchoscopy aspirates be cultured? Am Rev Resp Dis 114:73, 1976

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Dr. Finegold Replies

TO THE EDITOR: I appreciate the opportunity to read and respond to the letter by Dr. Mark.

I certainly agree that early, and even repeated, bronchoscopy can be a valuable diagnostic and therapeutic tool, as he has stressed. In the particular patient discussed in the June Medical Staff Conference, it should have been clear on clinical grounds (as discussed by Dr. Murray and me)